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<p>(21) International Application Number: PCT/US98/11692</p> <p>(22) International Filing Date: 5 June 1998 (05.06.98)</p> <p>(30) Priority Data: 60/048,771 6 June 1997 (06.06.97) US 60/049,443 12 June 1997 (12.06.97) US</p> <p>(71) Applicant (for all designated States except US): E.I. DU PONT DE NEMOURS AND COMPANY [US/US]; 1007 Market Street, Wilmington, DE 19898 (US).</p> <p>(72) Inventors; and</p> <p>(75) Inventors/Applicants (for US only): FALCO, Saverio, Carl [US/US]; 1902 Millers Road, Arden, DE 19810 (US). ALLEN, Stephen, M. [US/US]; 12 Stanton Avenue, West Chester, PA 19382 (US). RAFALSKI, J., Antoni [US/US]; 2028 Longcome Drive, Wilmington, DE 19810 (US). HITZ, William, D. [US/US]; 404 Hillside Road, Wilmington, DE 19807 (US). KINNEY, Anthony, John [US/US]; 609 Lore Avenue, Wilmington, DE 19809 (US). ABELL, Lynn, Marie [US/US]; 5 Laurel Court, Wilmington, DE 19808 (US). THORPE, Catherine, Jane [GB/GB]; 120 Ross Street, Cambridge CB1 3BU (GB).</p>		<p>(74) Agent: MAJARIAN, William, R.; E.I. du Pont de Nemours and Company, Legal Patent Records Center, 1007 Market Street, Wilmington, DE 19898 (US).</p> <p>(81) Designated States: AL, AM, AU, AZ, BA, BB, BG, BR, BY, CA, CN, CU, CZ, EE, GE, GW, HU, ID, IL, IS, JP, KG, KP, KR, KZ, LC, LK, LR, LT, LV, MD, MG, MK, MN, MX, NO, NZ, PL, RO, RU, SG, SI, SK, SL, TJ, TM, TR, TT, UA, US, UZ, VN, YU, ARIPO patent (GH, GM, KE, LS, MW, SD, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG).</p>
<p>(54) Title: PLANT AMINO ACID BIOSYNTHETIC ENZYMES</p>		<p>Published</p> <p><i>Without international search report and to be republished upon receipt of that report.</i></p>
<p>(57) Abstract</p> <p>This invention relates to an isolated nucleic acid fragment encoding a plant enzyme that catalyzes steps in the biosynthesis of lysine, threonine, methionine, cysteine and isoleucine from aspartate, the enzyme a member selected from the group consisting of: dihydroadipiculate reductase, diaminopimelate epimerase, threonine synthase, threonine deaminase and S-adenosylmethionine synthetase. The invention also relates to the construction of a chimeric gene encoding all or a portion of the enzyme, in sense or antisense orientation, wherein expression of the chimeric gene results in production of altered levels of the enzyme in a transformed host cell.</p>		

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